

April 2, 2015

Ms. Pebbles Opp Environmental Engineer, Portage, Inc. Authorized Representative of MDEQ Petroleum Tank Cleanup Section P.O. Box 200901 Helena, MT 59620-0901

RE: Additional Corrective Action and Work Plan

Toner's Tire Rama, 125 Main Street, Rudyard, Hill County, Montana

Facility ID 21-02475, Release #3259; WP ID 9956

Dear Ms. Opp,

Big Sky Civil & Environmental, Inc. (BSCE) has prepared this Initial Remedial Investigation Work Plan for the subject property.

In accordance with the Montana DEQ request letter dated February 18, 2015, BSCE proposes to conduct investigative activities at the Toner's Tire Rama site as defined herein. Investigative activities will include four to five (4-5) soil borings to a depth of approximately 15-20 feet below ground surface (bgs). Soil samples will be collected at one (1) foot intervals from surface to depth at each boring. Soil samples will be field-screened using BSCE's photo-ionization detector (PID). At least one (1) soil sample will be collected from each boring at the interval exhibiting the highest PID reading or at the soil/groundwater interface. Select soil samples will be submitted to TestAmerica for volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbon (EPH) screen analyses. If EPH screen exceeds 200 parts per million, soil samples will be fractionated.

Groundwater monitoring wells (MW's) will be installed at all soil boring locations and will be constructed using 2-inch threaded Sch. 40 PVC, solid and screened pipe. PVC screen will be installed from the depth of each well (approximately 15-20' bgs) to approximately 2.5-ft bgs, and solid casing will be installed from 2.5-ft bgs to the surface. It has been reported to BSCE by local citizens that groundwater in the community is quite shallow, possibly less than 5-ft bgs; we reserve the right to modify screening intervals if deemed necessary upon field observation. The annular space will be backfilled using 10/20 silica sand and bentonite chips. A flush-mount, watertight manhole will be set in concrete at the surface to protect the well casing and to facilitate vehicular traffic at the site. See **Figure 1** for proposed monitoring well locations.

The soil boring / monitoring well locations, as depicted on Fig 1, are intended to allow the consultant to assess the preliminary extent and magnitude of soil and groundwater contamination. We do not believe there is adequate room between the current tank basin and the existing buildings north and east of the tank basin that will allow MW installation in these areas. For this reason, we are proposing to move the presumed downgradient MW's (#4 and #5) into the alley and public R/W north and east of the buildings. The other MW's (#2 and #3) are shown as being located immediately upgradient of the current tank basin, allowing us to identify contaminant concentrations as close as possible to the original 'source' area; MW #1 is shown further upgradient and is intended to be a 'background' well. It is our goal to keep the upgradient wells out of MDT R/W so as to avoid the need for securing an encroachment permit, at least for the first phase of investigative fieldwork.

Ms. Pebbles Opp Toner's Tire Rama April 2, 2015

A survey of all onsite wells will be completed following well installations. Groundwater samples will be collected from each monitoring well and analyzed for VPH and EPH screen; if the EPH screen exceeds 1,000 parts per billion, groundwater samples will be fractionated. Additionally, groundwater samples will be analyzed for EPA Method 8260B for 1,2-dichloroethane and EPA Method 8011 for ethylene dibromide (EDB).

Furthermore, BSCE will collect five (5) soil samples from the DEQ approved landfarm that was utilized for disposal of the contaminated soils previously excavated / removed from the subject property. Soil samples will be analyzed for VPH and EPH screen; if EPH screen exceeds 200 parts per million, soil samples will be fractionated. Soil sample locations will be identified using latitude and longitude coordinates as well as onsite photographs.

BSCE personnel visited the subject property, accompanied by the property owner, to identify potential receptors and migration pathways that may require further assessment to determine if threats to human health and the environment are present. BSCE staff was informed that the buildings on the subject property and on the adjacent property to the north (McNair Furniture) consisted of slab-on-grade construction. It is assumed, based on the topographic gradient, the hydraulic gradient / potentiometric surface slopes easterly/northeasterly. All utilities that serve the building on the subject property appear to be either located to the south of the tank basin or on the east side of the building. Based on best available information, the utilities of highest concern are the water service to the building and the water main in MDT R/W. An individual working for Toner's Tire Rama believes the water service to the building is copper, and he believes the water main in MDT R/W is asbestos cement. If contamination exists in highway R/W, additional assessment of the water main may be warranted. The consultant will attempt to obtain more information during RI fieldwork.

Following completion of the subsurface investigation, BSCE will have a better understanding as to whether any of these utility corridors may be adversely affected or whether they may be serving as a potential conduit for hydrocarbon migration. The investigation will allow us to determine if petroleum hydrocarbons have migrated under the buildings and/or into the adjacent right-of-ways or alleys.

After completion of the subsurface soil investigation, monitoring well installation, and the completion of soils and groundwater analyses, one (1) Standardized Initial RI Report (RIR-01) will be prepared and submitted to Montana DEQ.

All soil sampling and groundwater monitoring will be completed in strict accordance with BSCE's standard QA/QC procedures. The following procedures will be used during sample collection to provide quality assurance and quality control (QA/QC), to minimize loss of volatiles, and to maintain the suitability of samples for analysis. Sample collection and analytical procedures were consistent with SW-846: *Test Methods for Evaluating Solid Waste*, November 1986, and updates published by the U.S. EPA. QA/QC methods used are defined below:

- All sample containers/preservatives will be supplied by a state-certified laboratory. Analyses will be performed by a state-certified laboratory.
- All samples will be handled in a manner which minimizes the loss of organic compounds to volatilization and biodegradation.
- All samples for analyses will be placed in a cooler on ice (at a temperature of 4° C) immediately following collection.

- Chain-of-custody procedures will be utilized during sampling and delivery.
- Documentation of the sampling and QA/QC procedures including notes will be available for DEQ inspection. These notes will document the procedures for sampling and all other routine activities, along with field notes describing the sequence of activities that took place during the corrective action cleanup and the following monitoring well construction and sampling.

Attached is a cost estimate for completing the above mentioned investigative fieldwork, analytical testing and report writing.

BSCE requested bids from three (3) contractors for the necessary drilling and well construction services. The companies contacted by BSCE were Boland Drilling Co. of Great Falls, Montana Salinity Control (MSC) of Conrad, and Hansen Environmental Drilling, Inc. of Glasgow.

The three bids received from drilling contractors are included. The price from MSC is included within BSCE's cost estimate. The decision to utilize the services of MSC is based primarily on price and also because they have previous drilling experience in the general area. However, it should be noted that MSC uses drilling equipment equipped with solid stem augers and a "gittings probe" for sample collection. No split-spoon sampling equipment will be available.

Thank you, Pebbles, and please feel free to contact us with any questions or concerns you may have.

Respectfully,

Nathan Besich, E.I.

Big Sky Civil & Environmental, Inc.

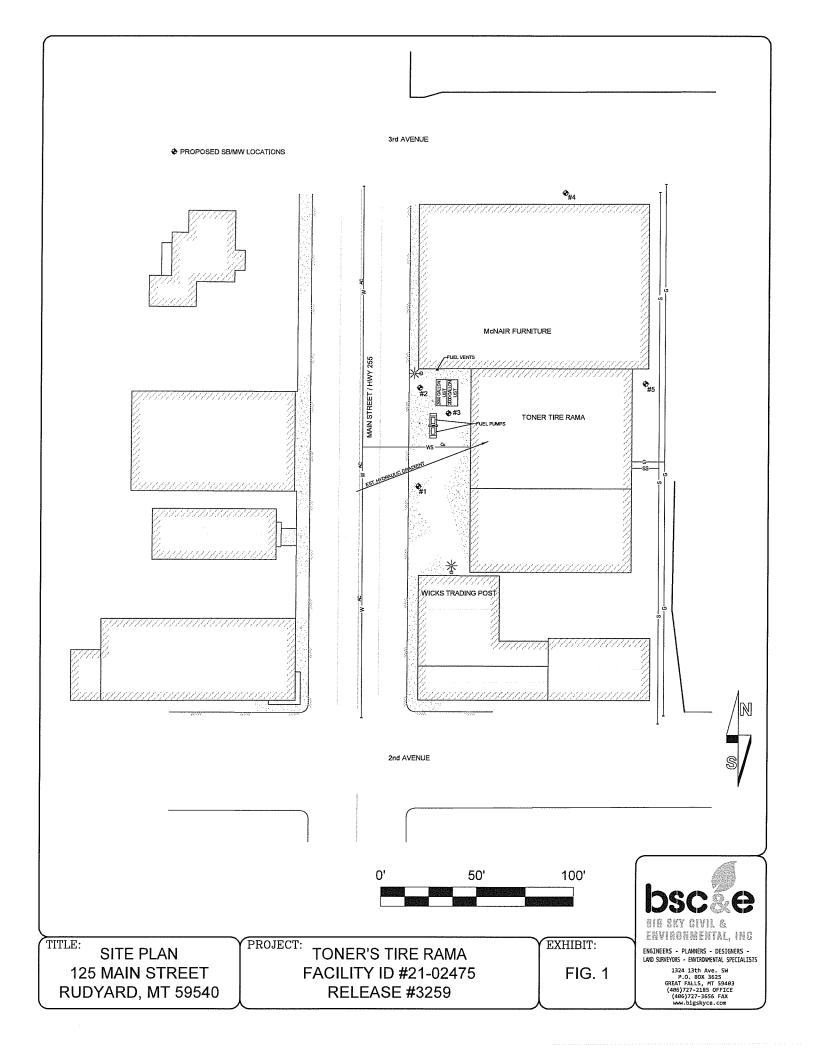
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Figure 1: Site Plan

Cost Estimate & Drilling Contractor Bids

cc:

Robert Toner Toner's Tire Rama PO Box 266 Rudyard, MT 59540



FIELDWORK/SAMPLING COST ESTIMATE

Task	Cost		Unit	Number of Units	Total Cost	
Senior Engineer ⁽¹⁾	T \$	130.00	/hr	8	\$	1,040.00
Project Engineer ⁽¹⁾	\$	112.50	/hr	12	\$	1,350.00
Engineer Technician ⁽²⁾	\$	88.00	/hr	40	\$	3,520.00
	**************************************			ar Alas (3.5), in Southfall and San San	Heriza	en Sommenheim (und Frieber)
Mobilization/Demobilization						
Mobilization/Demobilization	\$	0.61	/mile	920	\$	561.20
Field Work						
GW Monitoring/Purging/Sampling	\$	170.00	/well	5	\$	850.00
Soil Boring & MW Const. @ 7% markup (see	ť	1,0.00	, ,,	J		
attached MT Salinity bid)					\$	3,839.16
PID Meter	\$	15.00	/hr	16	\$	240.00
GPS - Trimble RTK	\$	115.00	/hr	8	\$	920.00
Deposit Description & Desirat Management	11/06/5					
Report Preparation & Project Management	<u> </u>					- A
Standard Initial CAP (CAP RI-01)	ļ	1,000.00	/report	1	\$	1,000.00
Initial RI Report (RIR-01)	\$2	2,950.00	/report	1	\$	2,950.00
	Estimated Project Expenses \$ 16,270.3					
					284940	
Per Diem (number of individuals)	<u></u>					
Per Diem: Motel	\$	100.00	/person per			
			. ـ ـ ـ ا		\$	-
			day /person per		\$	
Per Diem: Food	\$	23.00	day /person per day		\$ \$	-
	\$	23.00	/person per	BRANDUSAN CADA STADEN 1820.W		-
Laboratory Analysis			/person per day		\$	1.005.20
<u>Laboratory Analysis</u> Volatile Petroleum Hydrocarbons (VPH)	\$	125.00	/person per day /sample	15	\$	1,875.00
<u>Laboratory Analysis</u> Volatile Petroleum Hydrocarbons (VPH) EPH Screen	\$	125.00 80.00	/person per day /sample /sample	15	\$ \$ \$	1,200.00
Laboratory Analysis Volatile Petroleum Hydrocarbons (VPH) EPH Screen EPH Fractionation ⁽³⁾ (assume 1/3 of samples)	\$ \$ \$	125.00 80.00 150.00	/person per day /sample /sample /sample		\$ \$ \$	1,200.00 750.00
Laboratory Analysis Volatile Petroleum Hydrocarbons (VPH) EPH Screen EPH Fractionation ⁽³⁾ (assume 1/3 of samples) EPA Method 8260B (1,2-dichloroethane)	\$ \$ \$ \$	125.00 80.00 150.00 110.00	/person per day /sample /sample /sample /sample	15 5 5	\$ \$ \$ \$	1,200.00 750.00 550.00
Laboratory Analysis Volatile Petroleum Hydrocarbons (VPH) EPH Screen EPH Fractionation ⁽³⁾ (assume 1/3 of samples) EPA Method 8260B (1,2-dichloroethane) EPA Method 8011 (ethylene dibromide (EDB))	\$ \$ \$ \$ \$	125.00 80.00 150.00 110.00 85.00	/person per day /sample /sample /sample /sample /sample	15 5 5 5	\$ \$ \$ \$ \$	1,200.00 750.00 550.00 425.00
Laboratory Analysis Volatile Petroleum Hydrocarbons (VPH) EPH Screen EPH Fractionation ⁽³⁾ (assume 1/3 of samples) EPA Method 8260B (1,2-dichloroethane) EPA Method 8011 (ethylene dibromide (EDB)) PTRCB sampling fee	\$ \$ \$ \$	125.00 80.00 150.00 110.00	/person per day /sample /sample /sample /sample	15 5 5	\$ \$ \$ \$ \$	1,200.00 750.00 550.00 425.00 150.00
Laboratory Analysis Volatile Petroleum Hydrocarbons (VPH) EPH Screen EPH Fractionation ⁽³⁾ (assume 1/3 of samples) EPA Method 8260B (1,2-dichloroethane) EPA Method 8011 (ethylene dibromide (EDB))	\$ \$ \$ \$ \$	125.00 80.00 150.00 110.00 85.00	/person per day /sample /sample /sample /sample /sample	15 5 5 5	\$ \$ \$ \$ \$	1,200.00 750.00 550.00 425.00
Laboratory Analysis Volatile Petroleum Hydrocarbons (VPH) EPH Screen EPH Fractionation ⁽³⁾ (assume 1/3 of samples) EPA Method 8260B (1,2-dichloroethane) EPA Method 8011 (ethylene dibromide (EDB)) PTRCB sampling fee	\$ \$ \$ \$ \$	125.00 80.00 150.00 110.00 85.00 10.00	/person per day /sample /sample /sample /sample /sample	15 5 5 5	\$ \$ \$ \$ \$ \$	1,200.00 750.00 550.00 425.00 150.00
Laboratory Analysis Volatile Petroleum Hydrocarbons (VPH) EPH Screen EPH Fractionation ⁽³⁾ (assume 1/3 of samples) EPA Method 8260B (1,2-dichloroethane) EPA Method 8011 (ethylene dibromide (EDB)) PTRCB sampling fee	\$ \$ \$ \$ \$	125.00 80.00 150.00 110.00 85.00 10.00	/person per day /sample /sample /sample /sample /sample /sample	15 5 5 5 15	\$ \$ \$ \$ \$ \$ \$	1,200.00 750.00 550.00 425.00 150.00 200.00 5,150.00

⁽¹⁾ General project management

⁽³⁾ EPH Fractionation will be required if EPH Screen results are higher than regulatory standards



⁽²⁾ Fieldwork management (includes coordination with subs, fieldwork supervision, survey, travel time, etc.)

Petroleum Tank Release Compensation Board Soil Boring/Monitoring Well Installation Unit Cost Worksheet

Contractor Infor	mation			
Company Name:	Montana Salinity Control Association			
Address:	P.O. Box 909			
City, State, Zip:	Conrad, MT 50425			
Cost Estimator:	Scott Brown Phone: 406-278	-3071		
Signature:	Scott Bean		Date:	3/25/15
	on and Specifications		Facility ID#	21-02475
A 1 1	s Tire Rama		Release #	
120 141	ain Street		WP ID #	3259
City: Rudya Type of Drilling Eq			I Specifications	9956
Hollow-Ste Air Rotary Direct Push Other (plea Soil Boring Number of Borings Boring Diameter (indepth (per boring - 1) Surface: Concrete: Soil Disposal: Onsite	m Augers Num Surf Dep se specify) solid stem Estin Bori Casi Surf Surf	th (per well) mated Depth ng Diameter ng Diameter	e: Asphalt: [] [to Groundwater (ft)	4-5 Barren:
Soil Sampling Continuous Interval Soi (specify int	erval)			

Cost Estimate Explanation:

- (1) Mobilization/Demobilization: Includes all costs and mileage to transport equipment, materials, and personnel to and from the site location. More than one mobilization event of either the drilling rig or support vehicle will require justification and pre-approval by the DEQ-PTCS and Board staffs. This item should be estimated on a per mile unit rate.
- (2) Soil Boring Installation: Includes all costs (labor, equipment, and materials) to drill, collect soil samples and abandon soil borings, as well as decontaminate equipment. Drilling costs should be estimated using a per foot unit rate. Unit cost should include handling of contaminated soil by stockpiling or placing in drums. Assume level "C" personal protective equipment.
- (3) Monitoring Well Installation: Includes all costs (labor, equipment, and materials) to drill, collect soil samples, and complete monitoring well to specifications and according to Montana Well Drillers Board rules, as well as decontaminate equipment. Drilling costs should be estimated using a per foot unit rate. Unit cost should include handling of contaminated soil by stockpiling or placing in drums. Assume level "C" personal protective equipment.
- ⁽⁴⁾ <u>Drilling Standy</u>: Drilling standby should be estimated on an hourly basis. Prior approval and justification for accumulating standby time is needed prior to billing.
- Well Development: Includes all costs (labor, equipment, and materials) to develop monitoring wells. This task should be estimated using a per well unit rate.
- (6) Monitoring Well Abandonment: Includes all costs (labor, equipment, and materials) to properly abandon a well location according to the Montana Well Drillers Board rules. Abandonment costs should be estimated using a per well unit rate.

Soil Boring/Monitoring Well Installation Unit Cost Worksheet

TASK	UNIT COST	NUMBER OF UNITS	TC	TAL COST
Mobilization/Demobilization (1)				
Mobilization/Demobilization: Drilling Rig	\$0.80 /mile	180	\$	\$144.00
Mobilization/Demobilization: Support Vehicle	\$0.80 /mile	180	\$	\$144.00
Soil Boring Installation (2)				
Drilling (0'-50' range per boring)	\$15.00 /foot	60	\$	\$900.00
Drilling (50'-100' range per boring)	/foot		\$	\$0.00
Other (please specify)			\$ [\$0.00
Monitoring Well Installation (3)	T			
Drilling (0'-50' range per well)	\$40.00 /foot	60	\$ [\$2,400.00
Drilling (50'-100' range per well)	/foot		\$	\$0.00
Other (please specify)			\$	\$0.00
Drilling Standby (4)				
-prior approval needed	/hour		\s _	\$0.00
-prior approvar needed	rrioui			
Well Development (5)		164-8061) y 19. g. 21. book 110 marie (+ 650		
Well Development	/well		<u> </u> \$ [\$0.00
Monitoring Well Abandonment (6)				
Abandonment	/well		\$ [\$0.00
Lodging may only be paid at actual costs when	documented by receipt	S:		
Per Diem	gin ing pangkan ing pangkan kemanggan to Mga ya nap gantangi balan	eritare (in the trade letter of the through the figure	0.5 (1.7949), (1.55)	yanga (1811) - tanga (1972) into Mesawani unung
Lodging: (number of individuals)	/person per day			\$0.00
Food: (number of individuals)	\$23.00/person per day			\$0.00
(Breakfast 5.00, Lunch 6.00, Dinner 12.00)	TOTAL PRO	OJECT EXPENSE	s =	\$3,588.00
			-1~	
Additional Conditions/Comments/Costs:				
Rental on concrete core drill estimated at \$250.00 for the proje	ct.			
This is a mobile drill B-31 with a 6" solid stem auger. The borir		ulled out and then casing	g, sand, ar	nd grout filled in
from the top. (2) Unit cost includes handling of contaminated cuttings by sto	ckpiling on support trailer and	hauled to Northern Mon	tana Joint	Disposal District for
disposal.				•
Costs are bid on a per foot basis. Any drilling or soil boring over	er 60 feet will be billed at the u	nit rate listed above.		

If you require assistance, call 406-444-9710.
Submit completed form to:
Petroleum Tank Release Compensation Board
PO Box 200902, Helena MT 59620-0902

Revised (5-7-2014) 2

Petroleum Tank Release Compensation Board Soil Boring/Monitoring Well Installation Unit Cost Worksheet

Contractor Information			•			
Company Name: Boland Drilling						
Address: 4701 N Star Blvd						
City, State, Zip: Great Falls, MT 59405						
Cost Estimator: Chris Boland			Phone: 406-761	-1063		
Signature: (F. Balan)			4/27/2015			
Project Information and Specifications						
Toner's Tire Rama			Facility ID#	21-02475		
Address: 125 Main street			Release #	3259		
Rudyard,MT			WP ID #	9956		
Type of Drilling Equipment			Monitoring Wel	Il Specifications		
Hollow-Stem Augers	X		Number of Wells	;	5	_
Air Rotary			Surface: Concre	te Asphalt Barr	ren	-
Direct Push			Depth (per well)		15	
Other (please specify)			Estimated Depth	to Groundwater (ft)		
Soil Boring			Boring Diameter	(inches)	8	
Number of Borings	5		Casing Diameter	and type (inches)	2	-
Boring Diameter (inches)	8		Surface Complet	ion: (Flush Mount) A	boveground	
Depth (per boring - ft)	15			No. Hoc.		
Surface: Concrete Asphalt Barren						
Soil Disposal: Onsite Stockpile Drums		:			25	
Abandonment: Bentonite Soil Cuttings						
Soil Sampling						
Continuous Soil Sampling	x					
Interval Soil Sampling (specify interval)						
No Sampling						

Cost Estimate Explanation:

- (1) <u>Mobilization/Demobilization</u>: Includes <u>all</u> costs and mileage to transport equipment, materials, and personnel to and from the site location. More than one mobilization event of either the drilling rig or support vehicle will require justification and pre-approval by the DEQ-PRS and Board staffs. This item should be estimated on a per mile unit rate
- (2) Soil Boring Installation: Includes all costs (labor, equipment, and materials) to drill, collect soil samples and abandon soil borings, as well as decontaminate equipment. Drilling costs should be estimated using a per foot unit rate. Unit cost should include handling of contaminated soil by stockpiling or placing in drums. Assume level "C" personal protective equipment.
- (3) Monitoring Well Installation: Includes all costs (labor, equipment, and materials) to drill, collect soil samples, and complete monitoring well to specifications and according to Montana Well Drillers Board rules, as well as decontaminate equipment. Drilling costs should be estimated using a per foot unit rate. Unit cost should include handling of contaminated soil by stockpiling or placing in drums. Assume level "C" personal protective equipment.
- (4) <u>Drilling Standy</u>: Drilling standby should be estimated on an hourly basis. Prior approval and justification for accumulating standby time is needed prior to billing.
- (5) Well Development: Includes all costs (labor, equipment, and materials) to develop monitoring wells. This task should be estimated using a per well unit rate.
- (6) Monitoring Well Abandonment: Includes <u>all</u> costs (labor, equipment, and materials) to properly abandon a well location according to the Montana Well Drillers Board rules. Abandonment costs should be estimated using a per well unit rate.

Soil Boring/Monitoring Well Installation Unit Cost Worksheet

TASK		UNIT COST NUMBER OF UNITS			TOTAL COST	
Mobilization/Demobilization (1)						
Mobilization/Demobilization: Drilling Rig	\$	2.00	/mile	300	\$	600.00
Mobilization/Demobilization: Support Vehicle	\$	1.50	/mile	370	\$	555.00
Soil Boring Installation (2)						
Drilling (0'-50' range per boring)	\$	28.00	/foot	75	\$	2,100.00
Drilling (50'-100' range per boring)			/foot		\$	-
Other (please specify)					\$	-
Monitoring Well Installation (3)						
Drilling (0'-50' range per well)	\$	28.00	/foot	75	\$	2,100.00
Drilling (50'-100' range per well)			/foot		\$	•
Other (please specify)					\$	-
Drilling Standby (4)						
-prior approval needed	\$	110.00	/hour		\$	-
Well Development (5)					*****	
Well Development	\$	100.00	/well		\$	-
Monitoring Well Abandonment (6)						
Abandonment	\$	100.00	/well		\$	•
Lodging may only be paid at actual costs whe	n documented by	receipts.				
Per Diem						
Lodging: number of individuals =	2 \$	100.00	/person per day	1	\$	200.00
Food: number of individuals =	2 \$	23.00	/person per day	2	\$	92.00
(Breakfast 5.00, Lunch 6.00, Dinner 12.00)						
			TOTAL PROJE	CT EXPENSE	\$	5,647.00

D.O.T. Drums

\$95.00

Additional Conditions/Comments/Costs:

Drill 5 soil borings and construct 2" monitor wells at Toners Tire Rama at Rudyard, MT

If you require assistance, call 406-841-5090. Submit completed form to:

Petroleum Tank Release Compensation Board PO Box 200902, Helena MT 59620-0902

Hansen Env. Drilling

Glasgow, MT

COST ESTIMATE

Rudyard, MT - Toner's Tire Rama Project: Big Sky - Nate Besich Client: 3/24/2015 Date: Parameters: 5 - 15' mon wells; 10' screen .010 Quote good for 90 days. sampling cuttings left on site in pile **CME 55** flush covers **TASK UNIT COST** # OF UNITS TOTAL COST Mobilization/Demobilization Mobilization and loading for job \$ 3.50 /mi 180 \$ 630.00 Per Diem \$ 23.00 /day 2 46.00 Room \$ 70.00 /day 2 \$ 140.00 \$ \$ Total Mobilization/Demobilization \$ 816.00 \$ Soil Boring 4" H.S.A. drilling 24.00 /ft \$ 75 \$ 1,800.00 \$ /hr 0 55 gal DOT drums \$ 120.00 /ea \$ 0 liners macrocore - 5' sampling \$ 8.00 /ea \$ 20 160.00 boring logs and state well logs /ea \$ 0 **Total Soil Boring** 1,960.00 **Monitoring Well Installation** 2' mon wells install. And mat. 21.00 /ft \$ 75 1,575.00 5" steel well protective bollards /ea 0 \$ 8" flush covers \$ \$ 160.00 /well 5 800.00 6" standpipes /well 0 \$ Total Monitoring Well Installation 2,375.00 Standby \$ 100.00 /hr 0 \$ Total Drilling Standby \$ Well Development Total Well Development 160.00 /well 5 \$ 800.00 Concrete drilling surface concrete drilling \$ 210.00 /well \$ if required \$ TOTAL PROJECT EXPENSES \$ 5,951.00 Special Conditions/Costs: client will locate underground utilities and select borehole locations.

<u>Additional Comments/Costs:</u> to see our equipment and qualifications see: hansenenvironmentaldrilling.com Thank you for considering Hansen Environmental Drilling Inc.

Signature Steve Hansen